## WHAT IS CLAIMED IS:

5

10

1. A thermoplastic resin comprising structural units of the following formulas (I) and (II):

as repeating units, wherein R represents a hydrogen atom or a hydrocarbon group, and m and n each denote an integer of 0 or 1 or higher, provided that m and n are not 0 at the same time.

- 2. The thermoplastic resin according to claim 1, wherein R is phenyl.
- 15 3. The thermoplastic resin according to claim 1, wherein R is hydrogen.
  - 4. A thermoplastic resin obtained by polymerizing a monomer having a structure of the following formula (III):

$$H_2C = C$$
 $H_2C - O - C$ 
 $H_2$ 
(III)

15

wherein R represents a hydrogen atom or a hydrocarbon group.

- 5. The thermoplastic resin according to claim 4, wherein R is phenyl.
  - 6. The thermoplastic resin according to claim 4, wherein R is hydrogen.
- 7. The thermoplastic resin according to claim 5 which has a degree of cyclization of 90% or higher.
  - 8. The thermoplastic resin according to claim 6 which has a degree of cyclization of 80% or higher.
  - 9. The thermoplastic resin according to claim 5 which has a glass transition temperature (Tg) of 180°C or higher, but lower than 270°C.
- 10. The thermoplastic resin according to claim 6 which has a glass transition temperature (Tg) of 100°C or higher, but lower than 125°C.

- 11. The thermoplastic resin according to any one of claims 4 to 6 which has a thermal decomposition point of  $350^{\circ}$  or higher.
- 12. The thermoplastic resin according to any one of claims 4 to 6 which has a moisture content of less than 0.01%.
- 10 13. A method for producing a thermoplastic resin comprising structural units of the following formulas (I) and (II):

5

as repeating units, wherein R represents a hydrogen atom
or a hydrocarbon group, and m and n each denote an integer
of 0 or 1 or higher, provided that m and n are not 0 at
the same time,

said method comprising polymerizing a monomer having a structure of the following formula (III):

$$H_2C = C$$
 $H_2C - O - C$ 
 $H_2$ 
(III)

wherein R represents a hydrogen atom or a hydrocarbon group.

14. Amoldedarticle obtained from a thermoplastic resin comprising structural units of the following formulas (I) and (II):

$$CH_2$$
 $CH_2$ 
 $CH_2$ 

as repeating units, wherein R represents a hydrogen atom or a hydrocarbon group, and m and n each denote an integer of 0 or 1 or higher, provided that m and n are not 0 at the same time.